

### REMARKS

Claims 1-50 were presented for examination, are pending and are rejected. Reconsideration is respectfully requested.

### The Notice of Appeal

On August 28, 2008, the applicant appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner, April 28, 2008, rejecting claims 1-50. The filing of the attached RCE and this submission hereby removes the appeal.

### Claim Objections

Claims 3-9, 20, 24-27, 30, 35, 36, 40-45 and 47 are objected to.

Claims 3-9, 20, 27, 30, 36, 45 have been amended in response to the Examiner's objections. Claims 35, 40-44 and 47 have been canceled.

The rejection of claims 24-26 and 35 is respectfully traversed.

Claims 24-25 depend from claim 22 which recites "inserting a catheter into an artery". Claims 24-25 provide further limitations on the method of claim 22 by reciting the specific structure of the catheter that is inserted into the artery.

Claim 26 provides further limitations on the method of claim 25 by reciting the specific structures of the transmitter and the receivers.

Therefore the objections should be withdrawn.

#### The 35 U.S.C. § 102 Rejections

Claims 1, 3-12, 14, 16, 17, 19-22, 24-30, 32-39 and 41 are rejected as being anticipated by Cespedes et al. The rejection is respectfully traversed.

In each independent claim (1, 16, 22, 30 and 45), the applicant's processing step includes the application of a wave-based algorithm that can map an angular location. As shown in the attached Declaration, incorporated herein by reference, and paper titled "Radial Reflection Diffraction Tomography for Intravascular Imaging", dated January 4, 2001, incorporated herein by reference, the inventor conceived the subject matter claimed in the above referenced patent application prior to the earliest possible effective filing date (April 19, 2002) of U.S. Patent Application Publication No.: 2003/0199767 A1 (Cespedes et al.). Therefore, the reference should be removed.

#### The 35 U.S.C. § 103 Rejections

Claims 2, 18, 23, 31 and 45-50 are rejected as being unpatentable over Cespedes et al. The rejection is respectfully traversed.

The rejection of claim 2 should be withdrawn because it depends from claim 1, which should be allowable as discussed above. The rejection of claim 18 should be withdrawn because it depends from claim 16, which should be allowable as discussed above. The rejection of claim 23 should be withdrawn because it depends from claim 22, which should be allowable as discussed above. The rejection of claim 31 should be

withdrawn because it depends from claim 30, which should be allowable as discussed above.

The rejection of claim 45 should be withdrawn because it includes means for constructing intravascular tomography images from data obtained from the plurality of receiving transducers and the means embody a Hilbert space inverse wave algorithm that can map an angular location and a plurality of frequency parameters of said received scattered energy waves. Such algorithm is a wave based algorithm and as shown above, the applicant conceived the use of a wave based algorithm to map an angular location prior to the effective date of the reference. The rejection of claims 46, and 48-50 should be withdrawn because they depends from claim 45.

Claims 13, 15, 40 and 42-44 are rejected as being unpatentable over Cespedes et al. in view of Zhdanov et al. The rejection is respectfully traversed.

The rejection of claims 13 and 15 should be withdrawn because they depend from claim 1, which should be allowable as discussed above. Claims 40 and 42-44 have been canceled. Therefore the rejection should be withdrawn.

### Conclusions

It is submitted that this application is in condition for allowance based on claims 1-34, 36-39, 45, 46 and 48-50 in view of the attached Declaration and the foregoing comments.

If any impediments remain to prompt allowance of the case, please contact the undersigned at 925-422-3682.

Respectfully submitted,

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